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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,504	09/07/2006	Norikazu Takashima	5183-0103PUS1	3504

2292 7590 11/13/2009
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EXAMINER

CHOW, CHIH CHING

ART UNIT	PAPER NUMBER
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2191

NOTIFICATION DATE	DELIVERY MODE
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11/13/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/568,504	Applicant(s) TAKASHIMA ET AL.	
	Examiner CHIH-CHING CHOW	Art Unit 2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/16/06, 9/21/07, 1/29/09, 6/1/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed on September 7, 2006.
2. The priority date considered for this application is August 20, 2003, which is the filing date of the International Patent Application, Japan 2003-296761.
3. Claims 1-20 have been examined.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims **1-6** of copending Application No.10/568,622. Although the conflicting claims are not

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identical, they are not patentably distinct from each other, from the comparison listed in the following table:

Co-Application (10/568,622) US 20070168912A1	Current Application (10/568,504) US 2007/0168911A1
Claim 1:	Claim 1:
A program creating system comprising:	A program creating system comprising: a screen information storing unit which holds screen information that forms an input screen of a parameter to create a first program that realizes a predetermined process; a providing unit which provides said screen information to a setting apparatus connected through a network;
an accepting unit which accepts an input of a parameter to create a program to realize a predetermined process;	an accepting unit which accepts the parameter input on the input screen displayed on the basis of said screen information from said setting apparatus through said network;
a producing unit which dynamically produces a source code of said program on the basis of said parameter;	a producing unit which dynamically produces a source code of said first program on the basis of said parameter;
a compiling unit which compiles said source code to create a program which can be executed by a predetermined terminal device; and	a compiling unit which compiles said source code to create said first program that can be executed by a predetermined terminal device; and
an instructing unit which detects that said source code is produced to instruct said compiling unit to compile the source code.	an instructing unit which detects that said source code is produced to instruct said compiling unit to compile the source code.
Claim 2:	Claim 2:

<p>The program creating system as set forth in claim 1, further comprising a checking unit which checks whether or not the data size of said program is smaller than a predetermined size to make it possible to provide said program to said terminal device when the data size of said program is smaller than a predetermined size.</p>	<p>The program creating system as set forth in claim 1, further comprising a checking unit which checks whether or not the data size of said first program is smaller than a predetermined size to make it possible to provide said first program to said terminal device when the data size of said first program is smaller than a predetermined size.</p>
<p>Claim 3:</p>	<p>Claim 3:</p>
<p>The program creating system as set forth in claim 2, further comprising a notifying unit which performs notification to urge reduction of the number of said parameters when the data size of said program is larger than said predetermined size.</p>	<p>The program creating system as set forth in claim 2, further comprising a notifying unit which performs notification to urge said setting apparatus to reduce the number of said parameters when the data size of said first program is larger than said predetermined size.</p>
<p>Claim 4:</p>	<p>Claim 4:</p>
<p>The program creating system as set forth in claim 2, wherein said predetermined size is set for each terminal device which uses said program.</p>	<p>The program creating system as set forth in claim 2, wherein said predetermined size is set for each terminal device which uses said first program.</p>
<p>Claim 5:</p>	<p>Claim 5:</p>
<p>The program creating system as set forth in claim 2, further comprising: a storing unit which stores a program checked by said checking unit; and a providing unit which provides the program stored in said storing unit to said terminal device, wherein said checking unit stores, when the data size of the program created by said producing unit is smaller than the predetermined size, the program in said storing unit.</p>	<p>The program creating system as set forth in claim 2, further comprising: a first program storing unit which stores a first program checked by said checking unit; and a providing unit which provides the first program stored in said storing unit to said terminal device, wherein said checking unit stores, when the data size of the first program created by said producing unit is smaller than the predetermined size, the first program in said storing unit.</p>

Claim 6:	Claim 6:
The program creating system as set forth in claim 2, further comprising a limiting unit which limits the number of said parameters such that the data size of said program becomes smaller than said predetermined size.	The program creating system as set forth in claim 1, further comprising a second program storing unit which holds a second program that causes said setting apparatus to form a limiting unit that limits the number of said parameters such that the size of said first program becomes smaller than said predetermined size, wherein said providing unit provides said second program to said setting apparatus together with said screen information.

Claims 1-6 of current application is anticipated by co-application claims 1-6 in that co-application claims 1-6 contain all the limitations of the current application claims 1-6. Claims 1-6 of the current application therefore is not patentably distinct from co-application claim 1-6 and as such is unpatentable for obvious-type double patenting.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Specification

6. The disclosure is objected to because of the following informalities: For all the ‘research content’, ‘research data’, ‘research item’, ‘researching system’.... recite throughout the entire application, does it really mean ‘search’? The terminal device is capable to accept user input and do ‘search’ through a network? If the applicants really mean ‘research’ throughout the entire application, please explain

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what kind of research program is the invention creating? Appropriate correction is required.

Claim Rejections – 35 USC § 101

7. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the condition and requirements of this title.

8. Claims 1-6, 15 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 merely recites a software part comprising a screen information, a providing unit, accepting unit, producing unit, compiling unit, and instruction unit, i.e., computer program per se. See Warmerdam, 33 F.2d at 1361, 31 USPQ 2d at 1760. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 178). See MPEP §2106 (IV)(B)(1)(a).

On this basis, claim rejected under 35 U.S.C. § 101.

9. Regarding claims 2-6 and 15, each of these claims is rejected based on its dependency to independent claim 1, and do not cure the deficiency of claim 1. The deficiency can be fixed by adding a processor or a storage to the system claim.

10. Claims 7-14, 16 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claim 7 merely recites a software part comprising an acquiring unit, a display process unit, a managing unit, a transmitting unit i.e., computer program per se. See Warmerdam, 33 F.2d at 1361, 31 USPQ 2d at 1760. In re Sarkar, 588

F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 178). See MPEP §2106 (IV)(B)(1)(a).

On this basis, claim rejected under 35 U.S.C. § 101.

11. Regarding claims 8-14 and 16, each of these claims is rejected based on its dependency to independent claim 7, and do not cure the deficiency of claim 7. The deficiency can be fixed by adding a processor or a storage to the system claim.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 recites “The program creating system as set forth in claim 2, further comprising a limiting unit which limits the number of said parameters such that the data size of said program becomes smaller than said predetermined size.”; the related description in paragraph [0012], “The system may further include a limiting unit which limits the number of parameters such that the data size of a program is smaller than the predetermined size. In this manner, since the number of parameters can be regulated in a step prior to production of a source code, a program can be effectively created.” And paragraphs “[0016] The limiting unit may compare the number of parameters accepted by the accepting unit with a predetermined number to determine whether or not the number of parameters must be reduced.

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[0017] When the number of parameters accepted by the accepting unit is larger than the predetermined number, the limiting unit may determine that the number of parameters must be reduced.

[0018] When the number of parameters must be reduced, the limiting unit may notify a notifying unit that notification is performed.”

– It’s not clear to the Examiner how does the limiting unit limit the number of the input parameters? Does it cut or eliminate some of the parameters that the user has entered? How does the system determine which parameters to be eliminated without impacting the program creating function? Does the system terminate the process if invalid parameters were entered? Does the notifying unit generate notification/warning to the user?

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

15. Claims 1-2, 5, 7, 15-16, 17-20 are rejected under 35 U.S.C. 102(a) as being anticipated by US 2003/0149958 A1, by Baluja et al., hereinafter “Baluja”.

As per claim 1, Baluja discloses:

- ***A program creating system comprising: a screen information storing unit which holds screen information that forms an input screen of a parameter to create a first program that realizes a predetermined process;***

Baluja teaches a program creating system comprising a screen information storing unit, see Baluja’s paragraph [0027], “A data log resident within the cellular

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telephone 101 may provide much of this type of information. Such an improved log can provide not only simple counting functions, such as numbers representing the peak number of requests, average length of requests and so forth, but may provide additional information with regard to the use of data within the cellular telephone 101.” – a screen information storing unit that holds screen information.

- a providing unit which provides said screen information to a setting apparatus connected through a network;

See Baluja’s paragraph [0023], “the base station 103 in turn communicates the requested data to the cellular telephone 101. The **service carrier 105** communicates with a source of data, such as the **Internet 107.**” And Fig. 2 and description in [0026], “The protocol translator 201 also accepts the **communications from the data provider such as the Internet 107** and translates it into an appropriate form to be further transmitted to the base station 103 and further transmitted to the cellular telephone 101.” – providing unit to set the connection through a network.

- an accepting unit which accepts the parameter input on the input screen displayed on the basis of said screen information from said setting apparatus through said network;

Baluja teaches a program creating system comprising an accepting unit, see Baluja's paragraph [0005], “a method of **automated code generation** includes identifying an event related to the execution of an application, **generating code related to the event using an automated process**, and integrating the code into the application.” Also see Fig. 2 and description in paragraph [0026], “FIG. 2 the service carrier 105 **accepts the requests for data** (*an accepting unit to accept an input of a parameter*) and provides replies.” FIG. 4A and description in paragraph

[0047], “The **parameters** of an event can be defined and the logging code to accommodate the recordation of that particular event defined.” Further, Figures 6A and 6B; and description in paragraphs [0077] and [0078]. And claim 14, “The method of claim 1 wherein **the code generation** comprises generating a function, and **customizing the function based on a parameter using the automated process**”.

- a producing unit which dynamically produces a source code of said first program on the basis of said parameter;

See Baluja’s FIG. 4A and description in paragraph [0047], “The **parameters** of an event can be defined and the logging code to accommodate the recordation of that particular event defined.” And claim 14, “The method of claim 1 wherein the code generation comprises generating a function, and **customizing the function based on a parameter using the automated process**”.

- a compiling unit which compiles said source code to create said first program that can be executed by a predetermined terminal device; and

See Baluja’s paragraph [0003], “in **portable communication devices**, such as cellular phones, an increasing number of applications that include wireless data are being developed and used.” – a predetermined terminal device; also see paragraph [0078], “If the application developer is developing the application in a compiled or assembled language, then, once the target code has been inserted into the application, **the application developer can compile** or assemble the application as illustrated in block 633.” And claim 12, “The method of claim 1 further comprising **compiling**, linking or calling the application with the code integrated therein”.

- an instructing unit which detects that said source code is produced to instruct said compiling unit to compile the source code.

See Baluja's Fig. 6 B and description in paragraph [0078], "Once the code provider receives the language of **the target application and the event to be monitored** the code provider may **generate the code to monitor the event**. ... Once the application developer has received the requisite target code the application developer can include it in the application program as illustrated in block 631. If the application developer is developing the application in a compiled or assembled language, then, once the target code has been inserted into the application, the application developer can **compile** or assemble the application as illustrated in block 633." -- the monitor has the similar function as an instructing unit, which detects source code that needs to be compiled.

As per claim 2, Baluja discloses:

- The program creating system as set forth in claim 1, further comprising a checking unit which checks whether or not the data size of said first program is smaller than a predetermined size to make it possible to provide said first program to said terminal device when the data size of said first program is smaller than a predetermined size.

The rejection of claim 1 is incorporated; further see Baluja's paragraph [0003], "Additionally, because more storage area is becoming available, **the size of such applications also tends to increase** as does the number of features available for each application."-- Paragraphs [0003] and [0004] reveal a potential memory size problem, in paragraph [0044], "each application would only need contained calls to the proper API (application programming interface) in order to log the data event. To the extent the APIs reside in the operating system or application execution environment, **the size of each application's code can be reduced.**" And

paragraph [0050], “it is likely that sharing portions of the log code among the events, which will be logged in an application, **will result in a saving of application size**. Similarly instead of each application having its own log code, the shared log code 417 may accomplish the same purpose as shown in FIG. 4B.”—both paragraphs [0044] and [0050] teaches the ways to fix the potential size problem, and it also teaches checking whether the newly generated source code will fit in the terminal device’s memory, which implies a need to know a predetermined memory size for the terminal device.

As per claim 5, Baluja discloses:

- The program creating system as set forth in claim 2, further comprising: a first program storing unit which stores a first program checked by said checking unit; and a providing unit which provides the first program stored in said storing unit to said terminal device, wherein said checking unit stores, when the data size of the first program created by said producing unit is smaller than the predetermined size, the first program in said storing unit.

The rejection of claim 2 is incorporated; further see Baluja’s paragraph [0040], “The application developer only needs to specify its use of the common resources and the language it will be using, for example saying to the code provider Because the application developer only provides the code provider with requests for code that uses common resources, **the application developer is free to keep the rest of their code proprietary (storage)** and secret, and yet know that it will function without interference from or interfering with other applications that use the same resources.” And paragraph [0048], “The queue may be a dynamic type

queue so that it does not permanently impact the amount of **storage** available overall.” – a storing unit which stores a program is available.

- a providing unit which provides the program stored in said storing unit to said terminal device, wherein said checking unit stores, when the data size of the program created by said producing unit is smaller than the predetermined size, the program in said storing unit.

See rejection above, the program stored in the storage unit is provided to the terminal device.

As per claim 7, Baluja discloses:

- A program creating system comprising: an acquiring unit which acquires screen information that forms an input screen of a parameter to create a program that realizes a predetermined process through a network;

See Baluja’s paragraph [0041], “the requests to log data made by the applications could be stored in the data log 307, thereby eliminating the need for the data log 205 at the service carrier 105 such as illustrated in FIG. 2. Because each cellular telephone could maintain its own data log, the need for some of the processing of the data log searching through the data log 205 at the service carrier 105 for data related to one user may be mitigated.”

- a display process unit which displays said input screen on a display unit on the basis of said screen information;

- a managing unit which accepts an input of a parameter depending on said input screen to manage the parameter; and

Baluja's disclosure applies mobile phones, a mobile phone has to have a display/screen for user to enter input parameters, and the input parameters will be accepted/processed by the mobile phone.

- a transmitting unit which outputs the parameter managed by said managing unit to a creating apparatus that creates said program through said network.

See Baluja's paragraph [0031], "The data for the data log 307 **can be transmitted** to the base station 103 and then provided to application developers, the service carrier 105 or whomever has an interest in such data."

As per claim 15,

- The program creating system as set forth in claim 1, wherein said terminal device is a mobile terminal.

The rejection of claim 1 is incorporated; see Baluja's Fig. 1 and description in paragraph [0022], "Accordingly, the references to the automatic generation of code for data logging of applications in cellular communications are intended only to illustrate the inventive aspects of the present invention, with the understanding that such inventive aspects have a wide range of applications in other electronic devices." wherein a cellular phone is a mobile terminal.

As per claim 16, Baluja discloses:

- The program creating system as set forth in claim 7, wherein said terminal device is a mobile terminal.

The rejection of claim 7 is incorporated; see Baluja's Fig. 1 and description in paragraph [0022], "Accordingly, the references to the automatic generation of code for data logging of applications in cellular communications are intended only to

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illustrate the inventive aspects of the present invention, with the understanding that such inventive aspects have a wide range of applications in other electronic devices." wherein a cellular phone is a mobile terminal.

As per claim 17, Baluja discloses:

- A program creating program causing a computer to realize: a screen information storing unit which holds screen information that forms an input screen of a parameter to create a first program that realizes a predetermined process; a providing unit which provides said screen information to a setting apparatus connected through a network; an accepting unit which accepts the parameter input on the input screen displayed on the basis of said screen information from said setting apparatus through said network; a producing unit which dynamically produces a source code of said first program on the basis of said parameter; a compiling unit which compiles said source code to create said first program that can be executed by a predetermined terminal device; and an instructing unit which detects that said source code is produced to instruct said compiling unit to compile the source code.

Claim 17 is a computer implemented program creating program version of claim 1, therefore see claim 1 rejection.

As per claim 18, Baluja discloses:

- A program creating module causing a computer to realize: a screen information storing unit which holds screen information that forms an input screen of a parameter to create a first program that realizes a predetermined process; a providing unit which provides said screen information to a setting

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apparatus connected through a network; an accepting unit which accepts the parameter input on the input screen displayed on the basis of said screen information from said setting apparatus through said network; a producing unit which dynamically produces a source code of said first program on the basis of said parameter; a compiling unit which compiles said source code to create said first program that can be executed by a predetermined terminal device; and an instructing unit which detects that said source code is produced to instruct said compiling unit to compile the source code.

Claim 18 is a computer implemented program creating module version of claim 1, therefore see claim 1 rejection.

As per claim 19, Baluja discloses:

- A program creating program causing a computer to realize: an acquiring unit which acquires screen information that forms an input screen of a parameter to create a program that realizes a predetermined process through a network; a display process unit which displays said input screen on a display unit on the basis of said screen information; a managing unit which accepts an input of a parameter depending on said input screen to manage the parameter; and a transmitting unit which outputs the parameter managed by said managing unit to a creating apparatus that creates said program through said network.

Claim 19 is a computer implemented program creating program version of claim 7, therefore see claim 7 rejection.

As per claim 20, Baluja discloses:

- A program creating module causing a computer to realize: an acquiring unit which acquires screen information that forms an input screen of a parameter to create a program that realizes a predetermined process through a network; a display process unit which displays said input screen on a display unit on the basis of said screen information; a managing unit which accepts an input of a parameter depending on said input screen to manage the parameter; and a transmitting unit which outputs the parameter managed by said managing unit to a creating apparatus that creates said program through said network.

Claim 20 is a computer implemented program creating module version of claim 7, therefore see claim 7 rejection.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 3-4, 6, 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0149958 A1, by Baluja et al., hereinafter “Baluja”, in view of US 2004/0181777, by Fam, hereinafter “Fam”.

As per claim 3,

- The program creating system as set forth in claim 2, further comprising a notifying unit which performs notification to urge said setting apparatus to

reduce the number of said parameters when the data size of said first program is larger than said predetermined size.

The rejection of claim 2 is incorporated; Baluja teaches a program creating system with a checking unit to check the size of the program but he does not teach ‘a notifying unit which performs notification to urge reduction of the number of parameters’ specifically, however, Fam teaches it in an analogous prior art; see Fam’s Fig. 3 and description paragraph [0025], “If a **particular parameter is not used in a particular device, the parameter is excluded from the parameter set** or included with a null value. The **uniform data format** universally stipulates parameter indices for parameter locations within the executable code 20, data formats, and **data lengths to ensure compatibility for all parameters used**”; paragraph [0022], “The mass storage device 12 further includes a **compatibility rule file** 28 correlating each of the electronic devices 40, 42, and 44 to be **programmed with parameter sets** 22, 24, and 26”; and paragraph [0026], “a **master parameter set** 60 and filters 62a and 62b (two shown for example) **can be stored in the mass storage device** 12. The master parameter set 60 contains **all parameters** for all supported electronic devices 40, 42, 44, as well as others and all usable values of these parameters.”—Fam’s disclosure needs to check the number of parameters entered and their types, if any of them does not comply with the rule, it’s obvious to the people in the art, the system will notify the user. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Baluja’s disclosure of a program creating system by using notifying unit to urge reduction of the number of parameters taught by Fam. The modification would be obvious because one of ordinary skill in

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the art would be motivated to ensure compatibility for all parameters used (Fam's paragraph [0025]).

As per claim 4,

- The program creating system as set forth in claim 2, wherein said predetermined size is set for each terminal device which uses said first program.

The rejection of claim 2 is incorporated; further see claim 3 rejection, a predetermined size (master parameter set) is set for the application code.

As per claim 6,

- The program creating system as set forth in claim 1, further comprising a second program storing unit which holds a second program that causes said setting apparatus to form a limiting unit that limits the number of said parameters such that the size of said first program becomes smaller than said predetermined size, wherein said providing unit provides said second program to said setting apparatus together with said screen information.

The rejection of claim 1 is incorporated; further see claim 3 rejection, Fam's disclosure has the function similar to a limiting unit, which checks whether the input number of parameters comply with the predetermined number of parameters (master parameter set).

As per claim 8,

- The program creating system as set forth in claim 7, further comprising a limiting unit which limits the number of said parameters such that the size of said program becomes smaller than a predetermined size, wherein said

transmitting unit outputs parameters within the limits imposed by said limiting unit to said creating apparatus.

The rejection of claim 7 is incorporated; for limiting unit feature see claim 6 rejection.

As per claim 9,

- The program creating system as set forth in claim 8, further comprising a notifying unit which performs notification to urge reduction of the number of said parameters when the number of said parameters must be limited.

The Rejection of claim 8 is incorporated; further see claim 3 rejection, Fam's disclosure has the function similar to a limiting unit, which checks whether the input parameter number hit the predetermined parameter size; it also notifies the user, by putting the invalid parameters to null value, see Fam's Fig. 3 and description paragraph [0025], "If a **particular parameter is not used in a particular device, the parameter is excluded from the parameter set or included with a null value.**"

As per claim 10,

- The program creating system as set forth in claim 8, wherein said program includes a component serving as an input interface, said managing unit manages a plurality of parameters to form said component as a group, and said limiting unit limits the number of said parameters in units of groups.

The rejection of claim 8 is incorporated; further see Fam's paragraph [0039], "the present invention is capable of loading a universal executable code **into a group of different portable electronic devices, and loading a specific parameter set to**

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each of the electronic devices to form operational code for each device.” – a plurality of parameters to form component as a group.

As per claim 11,

- The program creating system as set forth in claim 9, wherein said limiting unit predicts the data size of a program created by said creating apparatus depending on the parameter managed by said managing unit to determine whether or not the number of said parameters must be reduced.

The rejection of claim 9 is incorporated; further see claim 3 rejection, Fam’s disclosure has the function similar to a managing unit, which checks whether the input number of parameters complies with the master parameter set, if the number of parameters is larger than the predetermined size, the input number of parameters must be reduced.

As per claim 12,

- The program creating system as set forth in claim 11, wherein when the predicted data size of the program is larger than said predetermined size, said limiting unit determines that the number of said parameters must be reduced.

The rejection of claim 11 is incorporated; further see claim 3 rejection, Fam’s disclosure has the function similar to a limiting unit, which checks (*predicts*) whether the input number of parameters complies with the master parameter set, if the number of parameters is larger than the predetermined size, the input number of parameters must be reduced. – Fam’s teaching has to limit the number of said parameters to said predetermined size.

As per claim 13,

- The program creating system as set forth in claim 9, wherein said limiting unit compares the number of parameters managed by said managing unit with a predetermined number to determine whether or not the number of said parameters must be reduced.

The rejection of claim 9 is incorporated; The rejection of claim 6 is incorporated; further see claim 3 rejection, Fam's disclosure checks the input parameter's number and data types, see Fam's paragraph [0025], "The uniform data format universally stipulates parameter indices for parameter locations within the executable code 20, data formats, and data lengths to **ensure compatibility for all parameters** used."

As per claim 14,

- The program creating system as set forth in claim 13, wherein when the number of parameters managed by said managing unit is larger than said predetermined number, said limiting unit determines that the number of said parameters must be reduced.

The rejection of claim 13 is incorporated; further see claim 3 rejection.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lo, US Patent No. 7,257,620, discloses a method and system for generating programming code and/or configuration data for programmable controller and the networks on which they operate is disclosed. In one embodiment, programming code is generated on a centralized server having a web-enabled engineering tool. The engineering tool operates on client devices that are in communication with

the server over a network, such as the Internet. Preferably, the engineering tool runs in a browser application (or other network-interfacing-application) on the client device and a user generates the programming code on the server with the aid of the client device.

Chong et al., US Patent No. 7,152,229, discloses a workflow code generator for generating executable code for multi-channel and/or multi-modal applications. The code generator may include a parser for reading application input files and creating internal representations of declarative statements within the input files. The code generator may further include a model analyzer, which processes the internal model to detect errors, perform optimization, and prepare for outputting the result. The code generator uses a symbol or mapping table for storing references to resources that have been used by the input application. The code generator assigns code fragments to object patterns, resolves data object references by referring to mapping table, and traverses the objects and emits code assigned to the objects.

Freeman, US Patent No. 5,937,188, discloses an apparatus that generates a sequence of code instructions for execution by a programmable processor to solve a problem. In includes generating a sequence of variable value data corresponding to postulate solutions to such problem; testing the postulate solution data in a relationship to determine whether or not they correspond to the solution to the problem; and, in the event that the test cannot be logically evaluated, storing data defining a decision forming part of the sequence of instruction codes, and generating a plurality of branches of the sequence to be performed depending upon the results of the decision including more than one possible branch from the

decision to be taken in the event of the same outcome of the decision, and for selecting one of the branches.

Frey et al., US 2003/0135842, discloses an invention concerns a software development tool for embedded computer systems, and is based on a repository of configurable, pre-programmed software components, together with associated tools for user selection and configuration of the components and a code generator for extracting relevant source code based on the configuration settings. Each software component, called embedded system infrastructure component (ESIC), is a self-contained object comprising a modular code base and associated configuration structure related to an infrastructure function in a hardware-independent, non-operating-system software infrastructure for an embedded computer system. For each ESIC, the configuration tool enables user configuration of the infrastructure function based on the configuration structure of the ESIC to match the requirements of the target application.

Van Gennip et al., US Patent No. 7,313,785, discloses an invention provides a compiler and linker for analyzing the structures of complex data stored in memory when a print statement specified in source code refers to those complex data structures, and then generating executable code which will print the complex data when a data processing system executes the executable code.

Hayashi, US Patent No. 4,992,971, discloses a language translating and linking system for translating and linking into a load program a plurality of source programs which include a calling program, having a first number of calling parameters, and a called program, having a second number of called parameters, the calling parameters must correspond to the respective called parameters. For this purpose, a compiler generates first and second parameter information

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representative of the calling and the called parameters from the calling and the called programs, respectively. A compiling unit memorizes the first and the second parameter information as first and second memorized parameter information. A linker compares the first memorized parameter information with the second memorized parameter information to check whether or not the calling parameters correspond to the respective called parameters.

Coppinger et al., US Patent No. 6,934,532, discloses a communication system includes a development sector for registering a plurality of wireless devices, a business sector for controlling utilization of an application program and for receiving application data, a service sector for deploying the application program and for providing the application data to the business sector in accordance with communication with at least one wireless device of the plurality; and a mobile sector comprising the plurality of wireless devices, each device for receiving the application program deployed by the service sector, executing the application program in response to the business sector, and communicating with the service sector to support provision of the application data to the business sector. The wireless device, such as a cell phone, personal digital assistant, or palm top computer may include an auxiliary device such as a bar code scanner, a magnetic stripe card reader, or a printer.

Narisawa et al., US Patent No. 6,851,106, discloses a code generation system is provided which optimizes a code generation for a control system applicable to an embedded control system without the need to increase its memory capacity. A total control unit 110 causes to read a model diagram and an operation diagram which depict a software specification stored in a memory 104, and starts specification analysis unit 106 to execute lexical

and grammatical analyses thereof.

Portwood, US 2004/0205706, discloses a method for developing an application for interacting with one or more external objects where a Workbench program receives the initial instructions from the software developer and queries the external objects which are to interact with the application to obtain sufficient information to interact with the external objects. A Built Project is produced by the Workbench which contains a series of instructions for a Runtime program to produce an application which interacts with the external objects. The Runtime takes the Built Project and using a runtime environment such as the JRE, builds the desired application.

Shoumura et al., US Patent No. 5,878,262, discloses a program development support system so adapted as to integrally manage a variety of information necessary for the development of a program by creating necessary links between information such as source programs to be employed for the development of the program, program parts, tools, specifications, handling persons and so on, by managing such information as resource information and by retaining attribute information of the links.

19. The following summarizes the status of the claims:

35 USC § 101 rejection: Claims 1-16

35 USC § 112 (2) rejection: Claim 6

35 USC § 102 rejection: Claims 1-2, 5, 7, 15-16, 17-20

35 USC § 103 rejection: Claims 3-4, 8-14

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Ching Chow whose telephone number is 571-272-3693. The examiner can normally be reached on 8:30am - 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature of relating to the status of this application should be directed to the **TC2100 Group receptionist: 571-272-2100**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Chih-Ching Chow/
Examiner, Art Unit 2191
11/03/09

/Ted T. Vo/
Primary Examiner, Art Unit 2191